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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,069	03/31/2000	George G. Robertson	M61.12-0143	1712

7590 09/11/2002

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EXAMINER	
VU, THANH T	

ART UNIT	PAPER NUMBER
2174	6

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/540,069	ROBERTSON ET AL.	
	Examiner	Art Unit	
	Thanh T Vu	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16,17,19-28 and 31-40* is/are rejected.

7)☒ Claim(s) *15,18,29,30 and 41* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 12-14, 16-17,19-20, 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated Sugiyama et al. ("Sugiyama", U.S. Pat No. 6,002,403).

3. Per claim 1, Sugiyama teaches a method of generating a display on a computer screen in a computer system, the method comprising: displaying a three-dimensional environment (fig. 5); displaying at least two tasks in the three dimensional environment, each task capable of including an image of at least two windows (figs. 5 and 7; items 112, 113); displaying the movement of one of the tasks in the three dimensional environment in response to input from a user (figs. 5 and 7; items 112, 113; col. 6, lines 35 – 59).

4. Per claim 12, Sugiyama teaches the method of claim 1 wherein displaying a three-dimensional environment comprises displaying a room in the three-dimensional environment by displaying a set of surfaces comprising a floor (fig. 4A).

5. Per claim 13, Sugiyama teaches the method of claim 12 wherein displaying a room further comprises displaying a right side wall and a left side wall (fig. 4A; items: 112 and 113).

6. Per claim 14, Sugiyama teaches the method of claim 13 wherein displaying a room further comprises displaying a ceiling connecting the right side wall to the left side wall (fig. 7; ceiling 114).

7. Per claim 16, Sugiyama teaches the method of claim 12, wherein displaying the movement of one of the tasks comprises displaying the movement of the task along one of the surfaces from the set of surfaces (figs. 5 and 7; items 112, 113).

8. Per claim 17, Sugiyama teaches the method of claim 12 wherein displaying the movement of one of the tasks comprises displaying the movement of the task from one of the surfaces from the set of surfaces to an adjacent surface from the set of surfaces (figs. 5 and 7; items 112, 113; col. 6, lines 11-13).

9. Per claim 19, Sugiyama teaches the method of claim 1 further comprising displaying a menu comprising a task movement selection and wherein displaying the movement of one of the tasks is based on the user selecting the task movement selection (col. 9, lines 8-11).

10. Claim 20 is similar in scope to claim 1 and therefore is rejected under similar rationale.

11. Per claim 31, Sugiyama teaches a method of generating a display on a computer screen, the method comprising: displaying a non-focus task in a three-dimensional environment, the non-focus task capable of including an image of at least two windows(fig. 5; item 113); displaying a stage area in the three dimensional environment (fig. 5; item 112); moving the non-focus task to the stage area based on a user input (fig. 7; item 113); and making the non-focus task a focus task by displaying the at least two windows such that the user can manipulate at least a portion of one window (fig. 7; item 113).

12. Per claim 32, Sugiyama teaches the method of claim 31 further comprising: before moving the non-focus task to the stage area, displaying a previous focus task in the stage area (fig. 5; item 112); converting the previous focus task into a converted non-focus task; and moving the converted non-focus task away from the stage area (fig. 7; item 112).

13. Per claim 33, Sugiyama teaches the method of claim 32 wherein converting the previous focus task into a converted non-focus task comprises: capturing an image of the previous focus task as it appears on the stage area (fig. 5; item 112); and replacing the previous focus task with the image of the previous focus task, the image of the previous focus forming the converted non-focus task (fig. 7; item 112).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 2-6, 8-9, 21-23, 25-28, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiysama et al. ("Sugiysama", U.S. Pat No. 6,002,403) in view of Marrin et al. (U.S. Pat No. 5,808,613).

16. Claims 2-3, Sugiysama teaches the method of claim 1, but doesn't specifically teach a method for displaying a three-dimensional environment comprises displaying the three-dimensional environment from the point of view of a camera in the three-dimensional environment and a method for moving the camera in the three-dimensional environment on input from the user. However, Marrin teaches a method for displaying a three-dimensional

environment comprises displaying the three-dimensional environment from the point of view of a camera in the three-dimensional environment and a method for moving the camera in the three-dimensional environment on input from the user (col. 3, lines 60-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Marrin in the invention of Sugiyama because it provides users navigational abilities to browse through the three-dimensional world.

17. Per claim 4, Marrin teaches the method of claim 3 wherein moving the camera comprises moving the camera to a preset location in the three-dimensional environment such that the user does not steer the camera to the location (col. 4, lines 30-35).

18. Per claim 5, Marrin teaches the method of claim 3 further comprising displaying a movement control in the three-dimensional environment and wherein moving the camera comprises moving the camera in response to the user selecting a movement control (fig. 2; items: 224, 232 and 254).

19. Per claim 6, Marrin teaches the method of claim 5 wherein displaying a movement control comprises displaying an arrow control that points in a direction of possible movement for the camera and wherein moving the camera comprises moving the camera in the direction pointed to by the arrow control when the user selects the arrow control (fig. 2; item: 232; col. 6, lines 36-44).

20. Per claim 8, Marrin teaches the method of claim 5 wherein displaying a movement control comprises displaying a home control and wherein moving the camera comprises moving the camera to a preset position in the three-dimensional environment when the user selects the home control (fig. 3; col. 5, lines 34-39).

21. Per claim 9, Marrin teaches the method of claim 5 wherein displaying a movement control comprises displaying overview control and wherein moving the camera comprises moving the camera to a position where the user can view the entire three-dimensional environment when the user selects the overview control (col. 5, lines 56-60).

22. Claim 21 is similar in scope to claims 2 and 3 and therefore is rejected under similar rationale.

23. Claims 22-23 and 25-27are similar in scope to claims 5-9 and 4 respectively and therefore are rejected under similar rationale.

24. Per claim 28, Sugiyama teaches the computer-readable medium of claim 21 wherein the preset position is located in front of a focus task in the three-dimensional environment, the focus task comprising windows that the user can manipulate (fig. 10; col. 9, lines 17-21).

25. Per Claim 34, Sugiyama teaches the method of claim 33 wherein capturing an image of the previous focus task comprises: rendering the image of the previous focus task (fig. 5; item 112); storing the image of the previous focus task (fig. 7; item 112), but doesn't teach moving a virtual camera from a current position to a preferred location in the three-dimensional environment; and returning the virtual camera to the current position. However, Marrin teaches a method of moving a virtual camera from a current position to a preferred location in the three-dimensional environment; and returning the virtual camera to the current position (col. 3; lines 60-67; col. 5, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Marrin in the invention of Sugiyama because it provides users navigational abilities to browse through the three-dimensional world.

26. Claim 35 is similar in scope to claim 34 and therefore is rejected under similar rationale.

27. Per claim 36, Sugiyama teaches the method of claim 31 further comprising: before displaying the non-focus task, displaying a menu comprising a task selection associated with the non-focus task (col. 9, lines 8-11); selecting the task selection based on input from the user; and wherein displaying the non-focus task comprises moving a virtual camera in the three-dimensional environment so that the non-focus task is in view based on the task selection (Fig. 10).

28. Claims 7, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiysama et al. ("Sugiysama", U.S. Pat No. 6,002,403) in view of Marrin et al. (U.S. Pat No. 5,808,613) and further in view of Matsuda(U.S. Pat No.6,346,956).

29. Per Claim 7, Sugiysama and Marrin teach the method of claim 6, but do not teach a method of displaying an image of a human figure proximate the arrow control. However, Matsuda teaches a method of using a human figure in a three-dimensional environment (fig. 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a human figure proximate the arrow control in the invention of Sugiyama and Marrin because it allows a user to see his position and view point in a three-dimensional world.

30. Claim 24 is similar in scope to claim 7 and therefore is rejected under similar rationale.

31. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiysama et al. ("Sugiysama", U.S. Pat No. 6,002,403) in view of Marrin et al. (U.S. Pat No. 5,808,613) and further in view of Horvitz et al.("Horvitz" U.S. Pat No.5,880,733).

32. Claims 10 -11, Sugiyasama and Marrin teaches the method of claim 5, but doesn't teach the method of using a touch-sensitive input device indicative of a user touching the input device and displaying the movement control in response to the signal and the method of using a touch-sensitive input device indicative of a user not touching the input device and removing the movement control in response to the second signal. However, Horvitz teaches the method of using touch-sensitive input device to receive a user's input (col. 6, lines 60-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a touch-sensitive device as taught by Horvitz in the invention of Sugiyama and Marrin as another choice of implementation to receive signals from users.

33. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiysama et al. ("Sugiyama", U.S. Pat No. 6,002,403) in view of Miller (U.S. Pat No. 6,229,542).

34. Per claim 37, Sugiyama teaches a computer-readable medium having computer executable components comprising: a environment display component capable of displaying a three-dimensional environment on a computer screen, the three-dimensional environment comprising at least one stage and at least one non-focus task (fig. 5; item 113); and a conversion component capable of converting the non-focus task into a focus task when the non-focus task reaches the stage (fig. 7, item 113), but doesn't teach a movement component capable of displaying animated movement of a non-focus task toward a stage. However, Miller teaches a movement component capable of displaying animated movement of a non-focus task toward a stage (col. 8, lines 28-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to show an animated movement of a non-focus task toward a stage

as taught by Miller in the invention of Sugiyama because it allows users a clear indication of the movement of tasks within a 3-D environment.

35. Per claim 38, Sugiyama teaches the computer-readable medium of claim 37 further comprising: a focus conversion component capable of converting a previous focus task on the stage into a converted non-focus task (figs. 5, and 7; item 112), but doesn't teach the movement component is capable of displaying animated movement of the converted non-focus task away from the stage. However, Miller teaches the movement component is capable of displaying animated movement of the converted non-focus task away from the stage (col. 8, lines 28-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to show an animated movement of the converted non-focus task away from the stage as taught by Miller in the invention of Sugiyama because it allows users a clear indication of the movement of tasks within a 3-D environment.

36. Per claim 39, Sugiyama teaches the computer-readable medium of claim 38 wherein the focus conversion component comprises a snapshot component capable of replacing the previous focus task with an image of the previous focus task (fig. 4A and 6A; col. 6, lines 11-13).

37. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. ("Sugiyama", U.S. Pat No. 6,002,403) in view of Miller (U.S. Pat No. 6,229,542) and further in view of Marrin et al (U.S. Pat. No. 5,808,613). Sugiyama teaches the computer-readable medium of claim 39 wherein the snapshot component is capable of generating the image of the previous focus task (fig. 4A and 6A; col. 6, lines 11-13), but does not teach the method of moving a virtual camera to a preset location in the three-dimensional environment and rendering the appearance of the three-dimensional environment from the point of view of the virtual camera.

However, Marrin teaches the method of moving a virtual camera to a preset location in the three-dimensional environment and rendering the appearance of the three-dimensional environment from the point of view of the virtual camera (col. 3, lines 60-67; col. 5, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as taught by Marrin in the invention of Sugiyama and Miller because it provides users navigational abilities to browse through the three-dimensional world.

Allowable Subject Matter

38. Claims 15,18, 29-30 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

39. The prior art either alone or in combination doesn't teach the limitation for Claim 41 of a menu generation component capable of generating a menu on the display before the movement component displays the animated movement of the non-focus task, the menu allowing a user to select the non-focus task as a focus task in combination with the other claimed features.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mackinlay (U.S. Pat. No. 6,088,032) discloses a means for prefetching linked objects in a document workspace.

Gandre (U. S. Pat. No. 5,754,809) discloses a system for implementing a perspective windowing technique for a computer GUI.

Shuping et al. (U. S. Pat. No. 6,313,855) discloses system and method for web browsing.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T Vu whose telephone number is (703)-308-9119. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L Kincaid can be reached on (703) 308-0640. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-746-7239 for regular communications and (703)-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TV
September 5, 2002

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